Academic Outcomes of 4-Year University Freshman Cohorts: A Comparison of Dual Enrollees & Advanced Placement (AP) Credit Recipients

University System of Ohio 4-Year University Main Campuses

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I. Introduction:

The dual enrollment option enables a student to earn both high school and college credit during high school by participating in a college course offered at the high school, at a college or university, or via distance learning. The positives of the dual enrollment option are obvious: when they enroll in college, dual enrollment credit recipients are able to reduce course-loads, the required time to graduate, and the overall cost of attendance.

Along with the considerable positives, however, there are questions on the academic performance of dual enrollees: how well do they perform in college? How do their performances compare with the same of students with other forms of accelerated learning such as the Advanced Placement (AP) test, or of students who do not benefit from either dual enrollment or AP tests?

This note provides brief answers to the questions. The note presents summary statistics and their graphical representations on three indicators of academic outcome: grade point average (GPA), the number of attempted hours, and the proportion of completed hours, all from the first year of attendance for 4-year university main campus freshman students at in the University System of Ohio (USO).

Sample:

The sample comprises freshman 4-year university main campus students from FY2007-08, FY2008-09, FY2009-10, FY2010-11, and FY2011-12 cohorts.

Dual enrollment student:

A freshman 4-year university student is considered to be a dual enrollee if she had received college credit from an institution in the USO while enrolled in a high school in the state of Ohio.

Classification of students:

The results are presented separately for four mutually exclusive groups as listed in table I.

- a. Students receiving AP credit.
- b. Students receiving AP credit as well as dual enrollment credit.
- c. Students receiving only dual enrollment credit.
- d. Comparison group: Students without either AP credit or dual enrollment credit.

Table I. The Classification of Freshman Students at 4-Year University Main Campuses: Sample Composition between FY2007-08 and FY2011-12 Cohorts.

	AP credit recipients only	Students with AP credit & dual enrollment credit	Students with dual enrollment credit only	Students without AP or dual enrollment credit
	Number	Number	Number	Number
FY2007-08	7,222	635	1,807	23,383
FY2008-09	7,210	810	2,226	23,223
FY2009-10	7,739	864	2,476	22,541
FY2010-11	8,219	980	2,798	22,506
FY2011-12	8,292	977	2,991	22,281

II. Results:

Table II.a presents grade point average (GPA) for each group over time; the values refer to freshman cohorts FY2007-08 to FY2011-12. Chart 1 presents the same statistics in a graphical form.

Table II.a and chart II.a show that AP credit recipients and students with AP and dual enrollment credit recorded the highest average values of first-year GPA. Students with only dual enrollment credit are in the middle while those without AP or dual enrollment credit have the lowest average GPA.

Table II.a and chart II.a also show that with minor fluctuations, the average GPA for each group remains approximately constant over time.

Table II.a. Average Grade Point Average (GPA) from the First-Year of Attendance: FY2007-08 to FY2011-12 Freshman Cohorts at 4-Year University Main Campuses.

	AP credit recipients only	Students with AP credit & dual enrollment credit	Students with dual enrollment credit only	Students without AP or dual enrollment credit
FY2007-08	3.236	3.319	2.825	2.417
FY2008-09	3.255	3.305	2.768	2.45
FY2009-10	3.235	3.296	2.727	2.392
FY2010-11	3.238	3.282	2.698	2.371
FY2011-12	3.216	3.234	2.737	2.446

Note: GPA is measured on a scale of 0 to 4.

Chart II.a. First-Year Grade Point Average: AP Test-takers, Dual Enrollees and the Comparison Group

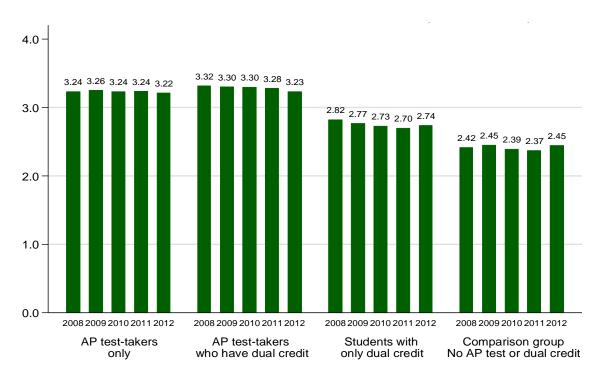


Table II.b presents the proportion of completed hours for each group for freshman cohorts FY2007-08 to FY2011-12. Chart II.b presents the same statistics in a graphical form.

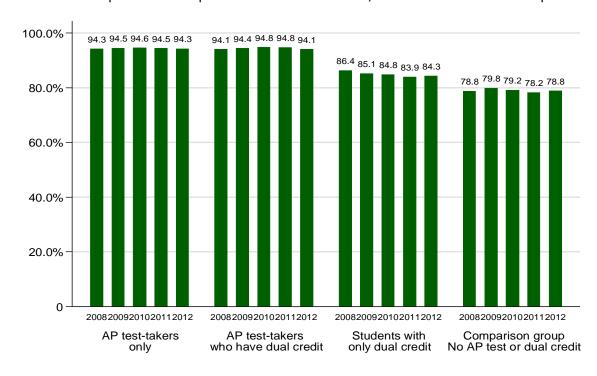
Similar to the observations with respect to GPA (from table II.a and chart II.a), AP credit recipients and students with AP and dual enrollment credit complete the highest proportion of their attempted hours; average completion rates are above 94.0% for the two groups. Students with only dual enrollment credit are in the middle as they complete between 83.9% and 86.4% of their attempted hours, while completion rates are just below 80.0% for students without AP or dual enrollment credit.

Similar to table II.a and chart II.a, course completion rates for students from a particular group are similar across the cohorts.

Table II.b The Proportion of Completed Hours in the First-Year of Attendance: FY2007-08 to FY2011-12 Freshman Cohorts at 4-Year University Main Campuses.

	AP credit recipients only	Students with AP credit & dual enrollment credit	Students with dual enrollment credit only	Students without AP or dual enrollment credit
FY2007-08	94.3%	94.1%	86.4%	78.8%
FY2008-09	94.5%	94.5%	85.1%	79.8%
FY2009-10	94.6%	94.8%	84.8%	79.2%
FY2010-11	94.5%	94.8%	83.9%	78.2%
FY2011-12	94.3%	94.1%	84.3%	78.8%

Chart II.b. The Proportion of Completed Hours: AP Test-takers, Dual Enrollees and the Comparison Group



Finally, table II.c presents the number of attempted hours for the freshman cohorts FY2007-08 to FY2011-12. Chart II.c presents the same statistics in a graphical form.

AP credit recipients and students with AP and dual enrollment credit attempt the highest number of hours (expressed in semester hours), followed by students with only dual enrollment credit. Students without AP or dual enrollment are at the other end of the distribution.

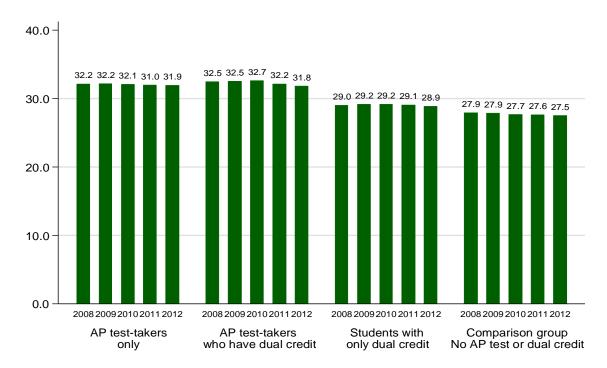
Table II.c and chart II.c also show that number of attempted hours changes little over time for any particular group.

Table II.c. The Number of Attempted Hours in the First-Year of Attendance: FY2007-08 to FY2011-12 Freshman Cohorts at 4-Year University Main Campuses.

	AP credit recipients only	Students with AP credit & dual enrollment credit	Students with dual enrollment credit only	Students without AP or dual enrollment credit
FY2007-08	32.1	32.5	29.0	27.9
FY2008-09	32.2	32.5	29.2	27.9
FY2009-10	32.1	32.7	29.2	27.7
FY2010-11	32.0	32.2	29.1	27.6
FY2011-12	31.9	31.8	28.9	27.5

Note: Attempted hours are expressed in semester hours.

Chart II.c. The Number of Attempted Hours: AP Test-takers, Dual Enrollees and the Comparison Group



III. Conclusion

Dual enrollees have better academic performance in comparison with students without any form of accelerated learning. However, dual enrollees do not perform as well as students with AP credit or students with both AP and dual enrollment credit. In fact, the latter group — with both AP and dual enrollment credit — represents the highest achievers; these students attempt the maximum number of hours, complete the highest proportion of the attempted hours, and record the highest GPAs.

Finally a word of caution is in order. Although causal relationships between AP or dual enrollment credits and academic outcomes can exist, the results presented in this note are not evidences of such relationships; they are illustrations of the differences among the groups.